

**Notice of Allowability**

Application No.

09/578,302

Examiner

Mohammad Ali

Applicant(s)

MILIC-FRAYLING ET AL.

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/13/05.
2. ☒ The allowed claim(s) is/are 12-91 (Renumbered as 1-80).
3. ☒ The drawings filed on 25 May 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 6/17/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
MOHAMMAD ALI  
PRIMARY EXAMINER

### **DETAILED ACTION**

1. This communication is in response to the Appeal Brief filed on 04/13/05.

After a search and a thorough examination of the present application and in light of the prior art made of records, claims 12-91 are allowed.

Claims 1-11 and 92-108 have been cancelled.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney, **Mike Medley (Reg. No. 57,058)** on June 17, 2005.

**Please replace the claims with new versions which was filed on 4/13/05 as follows:**

**Please cancel claims 1-11.**

12. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:  
    sending a query to an independent search engine;  
    receiving query results from the search engine; ~~and~~  
    generating information regarding relevancy of the query results based at least in part upon a user model and independent of the search engine; and

generating an independently modeled query based at least in part upon the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task.

13. (Original) The method of claim 12, wherein the information is used to highlight relevant portions of text in the retrieved documents.

14. (Currently amended) The method of claim 12, wherein documents are retrieved while a user that generated the query may be performing other tasks.

15. (Original) A computer readable medium having instructions stored thereon that causes a computer to perform the method of claim 12.

16. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending a query to an independent search engine;

creating a context based at least in part upon a user model;

receiving query results from the search engine; [[and]]

generating information regarding relevancy of the query results independent of the search engine and based upon the context; and

generating an independently modeled query based at least in part upon the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task.

17. (Original) The method of claim 16, wherein each new search within the context

results in information being generated for documents identified by such search based upon such context.

18. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending [[a]] an independently modeled query to a search engine separate from the computer, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

receiving query results from the search engine;  
enhancing the query based at least in part upon a user model;  
accessing documents identified by the query results;  
applying the enhanced query to the retrieved documents; and  
generating information regarding the relevancy of the retrieved documents based on the enhanced query.

19. (Original) The method of claim 18 wherein the query is enhanced based on linguistic analysis.
20. (Original) The method of claim 19 wherein the linguistic analysis comprises syntactic and semantic analysis.
21. (Original) The method of claim 18, wherein the query is enhanced based on a general interest profile.
22. (Original) The method of claim 21, wherein the general interest profile is applied equally to documents accessed by the user in both search and browsing modes.
23. (Original) The method of claim 18, wherein the query is enhanced based on a model of user interest generated independent of search results.
24. (Original) The method of claim 18, wherein the information is used to highlight relevant portions of text in the retrieved documents.
25. (Original) The method of claim 18, wherein the query is enhanced during retrieval of documents from their sources.
26. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 18.
27. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:
  - sending a query to a search engine separate from the computer;
  - receiving ranked query results from the search engine;
  - accessing documents identified by the query results;

re-ranking the query results based on information contained in the retrieved documents and upon a user model; and

delivering an independently modeled query to the search engine based at least in part upon the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task.

28. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 27.

29. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending a query to a search engine separate from the computer;

receiving ranked query results from the search engine;

augmenting the query to create an independently modeled query based at least in part upon a user model, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task; and

re-ranking the query results based on the augmented query and user model.

30. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending [[a]] an independently modeled query to an independent search engine, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description

of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

receiving query results from the search engine;

retrieving a document; and

scrolling to a most relevant portion of the retrieved document based at least in part upon a user model.

31. (Original) The method of claim 30, wherein the document is divided into sections, and wherein a relevancy score is generated for each section.

32. (Original) The method of claim 31 wherein the most relevant portion is the section with the highest score.

33. (Original) The method of claim 31 wherein one or more sections overlap other sections.

34. (Original) The method of claim 31 wherein each section is a paragraph.

35. (Original) The method of claim 31 wherein each section is a sentence.

36. (Original) The method of claim 31 wherein each section comprises a predetermined number of lines.

37. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 30.

38. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:  
sending a query to an independent search engine;

receiving query results from the search engine;  
retrieving a document identified in the query results; [[and]]  
generating an independently modeled query based at least in part upon the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task; and  
extracting names from the document and identifying associated links to such names based at least in part upon a user model.

39. (Original) The method of claim 38 wherein the names comprise names of people or companies.

40. (Original) The method of claim 38 wherein the links are internal to the document.

41. (Original) The method of claim 38 wherein the links are external to the document.

42. (Original) The method of claim 38 wherein the names are provided in a list next to the query results to help identify the relevance of documents.

43. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 38.

44. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending [[a]] an independently modeled query to an independent search engine, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description



of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

receiving query results from the search engine;  
retrieving a document identified by such query results; and  
creating a thumbnail view of the document with portions of the view highlighted based on relevancy of corresponding portions of the document, such thumbnail view based at least in part upon a user model.

45. (Original) The method of claim 44 wherein the highlighted portions correspond to links back to corresponding portions of text in the document.

46. (Original) The method of claim 44 and further comprising enhancing the query.

47. (Original) The method of claim 46 wherein the relevancy of the portions is determined based at least partially on the enhanced query.

48. (Original) The method of claim 46 wherein the query is enhanced based on linguistic analysis.

49. (Original) The method of claim 46, wherein the query is enhanced based on a general interest profile.

50. (Original) The method of claim 46, wherein the query is enhanced during retrieval of documents.

51. (Original) The method of claim 44, wherein documents are retrieved while a user that generated the query may performing other tasks.

52. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 44.

53. (Currently amended) A computer implemented method of enhancing query results provided independent of a search engine, the method comprising:

sending [[a]] an independently modeled query to an independent search engine, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

receiving query results from the search engine; and

retrieving a document identified by such query results;

identifying relevant portions of the document based at least in part upon a user model; and

generating a summary of the document comprising the most relevant portions identified, such summary portions based at least in part upon a user model.

54. (Original) The method of claim 53, wherein the document is divided into sections, and wherein a relevancy score is generated for each section.

55. (Original) The method of claim 54 wherein the most relevant portions are the sections with the highest score.

56. (Original) The method of claim 54 wherein each section is a sentence.

57. (Original) A computer readable medium having instructions stored thereon that cause a computer to perform the method of claim 53.

58. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends a query to a search engine separate from the computer;  
a module that receives query results from the search engine;  
a module that retrieves documents identified by the query results;  
a module that enhances the query based at least in part upon a user model;  
a module that applies the enhanced query to the retrieved documents; the enhanced query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task; and  
a module that generates information regarding relevancy of the retrieved documents based at least in part upon the enhanced query.

59. (Original) The system of claim 58 wherein the query is enhanced based on linguistic analysis.

60. (Original) The system of claim 59 wherein the linguistic analysis comprises syntactic and semantic analysis.

61. (Original) The system of claim 58, wherein the query is enhanced based on a general interest profile.

62. (Original) The system of claim 61, wherein the general interest profile is applied equally to documents accessed by the user in both search and browsing modes.

63. (Original) The system of claim 58, wherein the query is enhanced based on a model of user interest generated independent of search results.

64. (Original) The system of claim 58, wherein the information is used to highlight relevant portions of text in the retrieved documents.

65. (Original) The system of claim 58, wherein the query is enhanced during retrieval of documents.

66. (Original) The system of claim 58, wherein documents are retrieved while a user that generated the query may performing other tasks.

67. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends [[a]] an independently modeled query to an independent search engine the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

a module that receives query results from the search engine; and

a module that generates information regarding relevancy of the query results based at least in part upon a user model and independent of the search engine.

68. (Original) The system of claim 67, wherein the information is used to highlight relevant portions of text in the retrieved documents.

69. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends [[a]] an independently modeled query to an independent search engine, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

a module that creates a context based at least in part upon a user model;

a module that receives query results from the search engine; and  
a module that generates information regarding relevancy of the query results independent of the search engine and based upon the context.

70. (Original) The system of claim 69, wherein each new search within the context results in information being generated for documents identified by such search based upon such context.

71. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends a query to a search engine separate from the computer;

a module that receives query results from the search engine;

a module that retrieves documents identified by the query results;

a module that enhances the query based at least in part upon a user model, the enhanced query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query,

an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task;

a module that applies the enhanced query to the retrieved documents; and  
a module that generates information regarding the relevancy of the retrieved documents based on the enhanced query.

72. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends a query to a search engine separate from the computer;

a module that receives ranked query results from the search engine;

a module that retrieves documents identified by the query results;

a module that re-ranks the query results based on information contained in the retrieved documents and upon a user model, the re-ranked query results based at least at least in part upon an independently modeled query that comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task.

73. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends a query to a search engine separate from the computer;

a module that receives ranked query results from the search engine;

a module that augments the query based at least in part upon a user model, the augmented query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query,

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an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task; and

a module that re-ranks the query results based on the augmented query and user model.

74. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

a module that sends a query to an independent search engine;

a module that receives query results from the search engine;

a module that retrieves a document; and

a module that scrolls to a most relevant portion of the retrieved document based at least in part upon a user model and an independently modeled query, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task.

75. (Original) The system of claim 74, wherein the document is divided into sections, and wherein a relevancy score is generated for each section.

76. (Original) The system of claim 75 wherein the most relevant portion is the section with the highest score.

77. (Original) The system of claim 75 wherein one or more sections overlap other sections.

78. (Original) The system of claim 75 wherein each section is a paragraph.

79. (Original) The system of claim 75 wherein each section is a sentence.
80. (Original) The system of claim 75 wherein each section comprises a predetermined number of lines.
81. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:
- a module that sends a query to an independent search engine;
  - a module that receives query results from the search engine;
  - a module that retrieves a document identified in the query results; and
  - a module that extracts names from the document and identifying associated links to such names based at least in part upon a user model and an independently modeled query that is based at least in part upon the received query results, the independently modeled query comprises an enhanced representation selected from a group that comprises at least two of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task.
82. (Original) The system of claim 81 wherein the names comprise names of people or companies.
83. (Original) The system of claim 81 wherein the links are internal to the document.
84. (Original) The system of claim 81 wherein the links are external to the document.
85. (Original) The system of claim 81 wherein the names are provided in a list next to the query results to help identify the relevance of documents.



86. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

- a module that sends a query to an independent search engine;
- a module that receives query results from the search engine;
- a module that retrieves a document identified by such query results; [[and]]
- a module that creates a thumbnail view of the document with portions of the view highlighted based on relevancy of corresponding portions of the document, such thumbnail view based at least in part upon a user model; and  
a module that generates an independently modeled query based at least in part upon the user model and the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task.

87. (Original) The system of claim 86 wherein the highlighted portions correspond to links back to corresponding portions of text in the document.

88. (Currently amended) A computer system for enhancing query results provided independent of a search engine, the system comprising:

- a module that sends a query to an independent search engine;
- a module that receives query results from the search engine; ~~and~~
- a module that retrieves a document identified by such query results;
- a module that identifies relevant portions of the document based at least in part upon a user model; [[and]]  
a module that creates an independently modeled query based at least in part upon the user model and the received query results, the independently modeled query includes an enhanced representation that is selected from a group comprising two or more of an original user description of the query, an augmented query, an original

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description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about a user's task; and

a module that generates a summary of the document comprising the most relevant portions identified, such summary portions based at least in part upon a user model.

89. (Original) The system of claim 88, wherein the document is divided into sections, and wherein a relevancy score is generated for each section.

90. (Original) The system of claim 89 wherein the most relevant portions are the sections with the highest score.

**Please cancel claims 92-108.**

***Reason for Allowance***

3. The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claims 12, 16, 18, 27, 29, 30, 38, 44, 53, 48, 67, 69, 71-74, 81, 86, and 88. More specifically, the prior art of records does not specifically suggest wherein as argued by Applicant's and further Amendment has been by an Examiner's Amendment.

The dependent claims, being definite, further limiting, and fully enabled by the specification and are also allowed.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mohammad Ali  
Primary Examiner  
Art Unit 2167

MA  
June 20, 2005